UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8, MONTANA OFFICE
FEDERAL BUILDING, 10 West 15th Street, Suite 3200
HELENA, MONTANA 59626

Ref: 8MO

August 30, 2007

Bonneville Power Administration
Public Affairs Office –DKC-7
P.O. Box 14428
Portland OR 97293-4428

Re: CEQ # 20070305, Rebuild of the Libby (FEC) to Troy 115-kV Transmission Line DEIS

Dear BPA:

The Environmental Protection Agency (EPA) Region VIII Montana Office has reviewed the Draft Environmental Impact Statement (DEIS) for the Rebuild of the Libby (FEC) to Troy Section of BPA's Libby to Bonners Ferry 115-kilovolt Transmission Line, in accordance with EPA responsibilities under the National Environmental Policy Act (NEPA), 42 U.S.C. 4231 and Section 309 of the Clean Air Act. Section 309 of the Clean Air Act directs EPA to review and comment in writing on the environmental impacts of any major Federal agency action. The EPA's comments include a rating of both the environmental impact of the proposed action and the adequacy of the NEPA document.

The EPA does not object to the Bonneville Power Administration's (BPA) proposal to rebuild the Libby to Troy 115-kV transmission line along the existing transmission line corridor using the Kootenai River realignment option to avoid impacts to Kootenai Falls. The EPA does, however, have some comments and concerns regarding water quality, wetlands and wildlife impacts associated with proposed transmission line and road construction activities. Our comments and concerns along with associated recommendations are identified below and discussed further in our more detailed comments (enclosed).

Significant road construction is proposed along with the transmission line reconstruction (i.e., improving approximately 20 miles of existing access road, and constructing 4.5 miles of new access road on and off the existing transmission corridor). Road construction can result in significant adverse effects to water quality. Sediment from roads, particularly during road construction and/or reconstruction, and from poorly maintained roads with inadequate road drainage, is a major cause of adverse water quality impacts. It will be important for BPA to properly plan and design road work and to utilize adequate sediment and erosion control BMPs during construction, and to properly maintain roads, to minimize erosion and reduce sediment production and transport from roads. This is particularly important since the project crosses 24 watersheds, including Pipe Creek, Bobtail Creek, Quartz Creek, Hunter Gulch, Dad Creek,

Burrell Creek, China Creek, and is adjacent to the Kootenai River. Bobtail Creek, Quartz Creek and segments of the Kootenai River are water quality impaired waters identified on Montana's Clean Water Act Section 303(d) list.

We are concerned that even though best management practices (BMPs) are proposed for use during transmission line and access road construction, short-term increases in sediment to 303(d) listed waters are still predicted. The DEIS states that short-term increases of small amounts of sediment are expected from construction activities, and that the tensioning site at structure 18/11 has the greatest potential for generating sediment that could adversely affect Bobtail Creek. Our policy is that further degradation of 303(d) listed waters should be avoided.

We believe watershed restoration activities should be included in the project to reduce existing sediment sources in order to compensate for sediment increases associated with transmission line and road construction (e.g., stabilize existing eroding banks; improve/install BMPs on additional existing roads, perhaps in cooperation with the Forest Service to reduce existing road sediment sources). This would provide better assurance that no further degradation occurs to 303(d) listed streams during transmission line and road construction, since a small amount of sediment transport is still likely to occur even with use of BMPs during transmission line and road construction. Unless existing sediment sources are reduced, 303(d) listed streams will be further degraded during transmission line and road construction.

The DEIS states that there would be wetland disturbance from removal of structures 22/4, 23/8 and 26/2, and that construction of new structures would result in "low to moderate" wetland impacts, and that new access roads would not be constructed in wetlands <u>where possible</u> (which does not preclude wetland impacts during road work). The extent of wetland impacts from the proposed project, therefore, has not been quantified and is not entirely clear. We recommend that a table be provided in the FEIS showing the acreage of wetlands likely to be impacted by the proposed project, along with a discussion of the associated wetland functions and values that may be lost.

It is important that the BPA consult with the Corps of Engineers in regard to Clean Water Act 404 permit requirements for construction activities in or near streams or wetlands, (e.g., contact Mr. Allan Steinle of Corps of Engineers Montana Office in Helena at 406-441-1375). The 404(b)(1) Guidelines (found at 40 CFR Part 230) provide the environmental criteria by which 404 permits are evaluated. If there are significant wetland and/or river/stream dredge and fill impacts from a project, we generally recommend that a 404(b)(1) analysis be included as an Appendix to the FEIS, since inclusion of a such an analysis helps assure that 404 permit requirements are properly integrated into the NEPA process in accordance with 40 CFR 1500.2(c). Section 404 Dredge and Fill Permit rules/policies require that adverse impacts to aquatic resources be avoided and minimized as much as possible, and that unavoidable impacts to wetlands be compensated for. Wetlands restoration, creation or enhancement measures should be proposed to compensate for unavoidable impacts to wetlands to attain no net loss of wetlands. The goal of wetland mitigation should be to replace the functions and values of impacted wetlands in areas adjacent to or as close as possible to the area of wetlands loss.

We did not see a clear identification of when and where mitigation wetlands would be restored or created to compensate for wetlands impacted by transmission line and road construction to assure that there will be no net loss of wetlands as a result of the proposed project. We believe the final EIS should more clearly identify and disclose proposed wetland mitigation activities that would compensate for unavoidable impacts to wetlands. This information could be provided in the narrative of the EIS or in the 404(b)(1) analysis appended to the EIS.

We also have concerns about potential impacts to the avian community from powerline operation due to bird strikes of the powerline and/or shield wires. We encourage BPA to use transmission line structural designs recommended by the Avian Power Line Interaction Committee (APLIC) to minimize adverse impacts to the avian community. This is especially important since the transmission line will be constructed in a river corridor with significant avian use. In addition, we recommend development of a monitoring program to determine if bird strikes or electrocutions occur as a result of this project. Field surveys conducted during the spring and fall migratory periods and the spring nesting period to locate birds which have been electrocuted or have struck transmission lines or shield wires will aid in identifying and modifying problem structures.

Finally, while we very much support control of noxious weeds along the transmission line corridor and access roads, we encourage prioritization of weed control methods that focus on non-chemical treatments first, with reliance on chemicals being the last resort, since weed control chemicals can be toxic and have the potential to be transported to surface or ground water following application. Herbicide drift into streams and wetlands could adversely affect aquatic life and wetland functions such as food chain support and habitat for wetland species. The DEIS indicates that overspray of herbicides could potentially affect water quality. We are particularly concerned about potential use of more toxic and persistent herbicides such as picloram (Tordon), since they have higher potential for stream and/or groundwater contamination. We recommend use of a 50 foot no herbicide spray buffer zone adjacent to streams and wetlands, and mechanical weed removal or hand-pulling of weeds adjacent to streams and wetlands. In addition we recommend that BPA commit to annual field reviews of the transmission line corridor and access roads, perhaps in coordination with local weed control Districts, to determine appropriate treatment or control measures for noxious weeds which may be needed on an on-going basis.

The EPA's further discussion and more detailed questions, comments, and concerns regarding the analysis, documentation, or potential environmental impacts of the Rebuild of the Libby (FEC) to Troy 115-kV Transmission Line DEIS are included in the enclosure with this letter. Based on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action and alternatives in an EIS, the Rebuild of the Libby (FEC) to Troy 115-kV Transmission Line DEIS has been rated as Category EC-2 (Environmental Concerns - Insufficient Information). A copy of EPA's rating criteria is attached. The EPA believes additional information is needed to fully assess and mitigate all potential impacts of the management actions.

The EPA appreciates the opportunity to review and comment on the DEIS. If we may provide further explanation of our comments and concerns please contact Mr. Steve Potts of my staff in Helena at (406) 457-5022 or in Missoula at 406-329-3313, or via e-mail at potts.stephen@epa.gov . Thank you very much for your consideration.

Sincerely,

/s/ John F. Wardell,
Director
Montana Office

Enclosures
cc: w/ enclosures
Larry Svoboda/Julia Johnson, 8EPA-N, Denver
Robert Ray/Mark Kelley, MDEQ, Helena

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements

Definitions and Follow-Up Action*

Environmental Impact of the Action

LO - - Lack of Objections: The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC - - Environmental Concerns: The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO - - Environmental Objections: The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU - - Environmentally Unsatisfactory: The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 - - Adequate: EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 - - Insufficient Information: The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 - - Inadequate: EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

EPA COMMENTS ON DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE REBUILD OF THE LIBBY (FEC) TO TROY SECTION OF BPA's LIBBY TO BONNERS FERRY 115-KILOVOLT TRANSMISSION LINE

Brief Project Overview

The Bonneville Power Administration (BPA) prepared this DEIS to evaluate a proposal to rebuild a 17-mile-long section of BPA's Libby to Bonners Ferry 115-kilovolt transmission line, to replace an existing 115-kV wood pole transmission line that runs west from Flathead Electric Cooperative's (FEC) Libby Substation near the town of Libby, to BPA's Troy Substation, east of Troy, Montana. The 17-mile transmission line corridor passes between the Purcell and Cabinet mountains as it follows the Kootenai River canyon from the town of Libby, Montana to the town of Troy, Montana. The Libby-Troy line has been steadily deteriorating, and BPA is concerned that it threatens the reliability of the regional system. BPA needs to rebuild or reinforce the Libby-Troy section of its transmission system to provide safe and reliable load service to Libby, Bonners Ferry, Sandpoint and many smaller communities in northwestern Montana, and to anticipate for the future growth of the area.

Three alternatives have been evaluated: the Proposed Action; Alternative 1; and the No Action Alternative, along with three realignment options. The No Action Alternative would involve continued operation and maintenance of the existing line in its current location.

Under the Proposed Action, BPA would rebuild the Libby-Troy section at the same voltage (115 kV) and with the same number of circuits (one) as currently exists. The proposed rebuild would be located primarily in BPA's existing right-of-way corridor. A combination of wood and steel H-frame and single wood pole and steel pole structures would be used. Additional transmission line corridor width would be acquired in the form of additional easements or permitted areas in some sections to bring the corridor up to minimum BPA standards for 115-kV transmission line operation (60-80 foot corridor). The proposed transmission line rebuild would require improving about 20 miles of existing access road on and off the existing transmission corridor and constructing about 4.5 miles of new access road on and off the existing corridor. Improvement and construction would consist of the following activities: widening existing roads; installing or improving an estimated 210 culverts, drain dips and water bars; installing two bridges, one at Burrell Creek and one at China Creek; constructing an access road for bridge approaches to China Creek; clearing and disposal of brush and trees; soil excavation and embankment placement for new roads (except roads constructed west of the gate at the end of Kootenai River Road); placing sub-grade reinforcement material (approximately 20,000 cubic yards); and placing crushed rock (approximately 40,000 tons).

Under Alternative 1, BPA would rebuild the line as a 230-kV, double-circuit line. Steel single-pole structures would be used, and additional easements and permitted areas would be acquired to bring the corridor up to minimum BPA standards for 230-kV transmission lines (100

foot corridor). These realignment options: Pipe Creek, Quartz Creek, and the Kootenai River Crossing, were identified to minimize impacts to private properties and cultural resources. One realignment avoids adjacent residences along Kootenai River Road near Pipe Creek; another realignment bypasses landowners in the Bighorn Terrace subdivision, and a third realignment avoids the Kootenai Falls area by moving the river crossing approximately 3/4 mile east of the present crossing of the Kootenai River.

BPA's preferred alternative at this time is the Proposed Action (rebuild to single-circuit 115 kV) with the Kootenai River realignment option.

Comments:

1. Thank you for providing clear maps showing the transmission line rebuild corridor along with the three realignment options, including identification of transmission line proximity to rivers and streams (Figures 3-1 and 3-2). We also appreciate inclusion of Tables 2-3 and 2-4 that provide alternatives matrices for comparison of alternatives. These maps and tables facilitate improved project understanding, help define issues, and assist in evaluation of alternatives providing a clearer basis of choice among options for the decisionmaker and the public in accordance with the goals of NEPA.

2. We did not see any discussion regarding the possibility of burying the transmission line underground. While we recognize that burial of the transmission lines would involve greater costs and greater disturbance of soils and vegetation and/or carry a higher risk for site and water quality contamination due to the need for a petroleum-based product to cool the underground conductors, burial would also reduce visual impacts along the transmission line corridor. We believe it would be appropriate to include some discussion of these issues and documentation of BPA's reasons for eliminating transmission line burial from further consideration.

3. We do not object to the proposed rebuild of the Libby to Troy 115-kV transmission line along the existing transmission line corridor using the Kootenai River realignment option to avoid impacts to Kootenai Falls. We do, however, have some comments and environmental concerns regarding water quality, wetlands and wildlife impacts associated with proposed transmission line and road construction activities. Our comments and concerns along with our associated recommendations are identified and discussed in our subsequent comments.

4. It is stated (page 2-9) the proposed transmission line rebuild would require improving approximately 20 miles of existing access road, and constructing approximately 4.5 miles of new access road on and off the existing transmission corridor. Existing roads would be widened, and an estimated 210 culverts, drain dips and water bars would be installed or improved.

We note that road construction can result in significant adverse effects to water quality. Sediment from roads, particularly during road construction and reconstruction, and from poorly maintained roads with inadequate road drainage, is a major cause of adverse water quality impacts. It will be important for BPA to properly plan and design roads and to utilize adequate sediment and erosion control BMPs during construction, and to properly maintain roads, to minimize erosion and reduce sediment production and transport from roads. Sediment and erosion control practices to be used during road construction and maintenance to mitigate water quality effects from roads should be more fully described, perhaps in an EIS Appendix. This is particularly important since the project crosses 24 watersheds, including Pipe Creek, Bobtail Creek, Quartz Creek, Hunter Gulch, Dad Creek, Burrell Creek, China Creek, and is adjacent to the Kootenai River (page 3-2). For your information and consideration, EPA's general recommendations regarding road construction are:

* minimize road construction and reduce road density as much as possible to reduce potential adverse effects to watersheds;

* locate roads away from streams and riparian areas as much as possible;

* locate roads away from steep slopes or erosive soils;

* minimize the number of road stream crossings;

* stabilize cut and fill slopes;

* provide for adequate road drainage and control of surface erosion with measures such as adequate numbers of waterbars, maintaining crowns on roads, adequate numbers of rolling dips and ditch relief culverts to promote drainage off roads avoid drainage or along roads and avoid interception and routing sediment to streams;

* consider road effects on stream structure and seasonal and spawning habitats;

* allow for adequate large woody debris recruitment to streams and riparian buffers near streams;

* properly size culverts to handle flood events, pass bedload and woody debris, and reduce potential for washout;

* replace undersized culverts and adjust culverts which are not properly aligned or which present fish passage problems and/or serve as barriers to fish migration;

* use bridges or open bottom culverts that simulate stream grade and substrate and that provide adequate capacity for flood flows, bedload and woody debris where needed to minimize adverse fisheries effects of road stream crossings.

We also encourage conduct of inspections and evaluations to identify conditions on roads that may cause or contribute to sediment delivery and stream impairment, and to correct road conditions impacting streams. It is important that road maintenance (e.g., blading) be focused on reducing road surface erosion and sediment delivery from roads to area streams. Grading (blading) of unpaved roads in a manner that contributes to road erosion and sediment transport to streams and wetlands should be avoided. Practices of expediently sidecasting graded material over the shoulder and widening shoulders and snow plowing can have adverse effects upon streams, wetlands, and riparian areas that are adjacent to roads. Road use during spring breakup conditions should also be avoided to limit runoff created road ruts during late winter thaws that increase road erosion (i.e., ruts channel road runoff along roads).

Forest Service Region 1 provides training for operators of road graders regarding conduct of road maintenance in a manner that protects streams and wetlands, (i.e., Gravel Roads Back to the Basics). If there are road maintenance needs on unpaved roads adjacent to streams and wetlands we encourage utilization of such training (contact Donna Sheehy, FS R1 Transportation Management Engineer, at 406-329-3312).

We also note that there are training videos available from the Forest Service San Dimas Technology and Development Center for use by the Forest Service and its contractors (e.g., "Forest Roads and the Environment"-an overview of how maintenance can affect watershed condition and fish habitat; "Reading the Traveled Way" -how road conditions create problems and how to identify effective treatments; "Reading Beyond the Traveled Way"-explains considerations of roads vs. natural landscape functions and how to design maintenance to minimize road impacts; "Smoothing and Reshaping the Traveled Way"-step by step process for smoothing and reshaping a road while maintaining crowns and other road slopes; and "Maintaining the Ditch and Surface Cross Drains"-instructions for constructing and maintaining ditches, culverts and surface cross drains).

5. Bobtail Creek, Quartz Creek and segments of the Kootenai River are listed as water quality impaired under Section 303(d) of the Clean Water Act by the State of Montana (page 3-3, also see MDEQ website http://www.deq.state.mt.us/CWAIC/default.aspx) . As noted in the DEIS a Total Maximum Daily Load (TMDL) has been prepared for Bobtail Creek, and this TMDL and Water Quality Restoration Plan is available on the MDEQ website, http://deq.mt.gov/wqinfo/TMDL/BobtailFinalTMDL/FinalBobtailCoverDoc.pdf. It is important that the proposed Libby to Troy transmission line project be consistent with the Bobtail Creek TMDL and Water Quality Restoration Plan. A TMDL for Quartz Creek will be prepared in association with the TMDL for the Kootenai River TMDL Planning Area, and is due 2009 to 2012. It will also be important for the proposed transmission line to be consistent with the TMDL for Quartz Creek and Kootenai River.

Consistency with a TMDL that has not yet been completed means that any additional degradation of the impaired water (i.e., pollutant increase) should be avoided and if

pollutants may be generated during project activities on impaired waters, mitigation or restoration activities should also be included to reduce existing pollutant sources to offset or compensate for pollutants generated during project activities. Recognizing uncertainties and desiring a margin of safety, such compensation should more than offset pollutants generated, resulting in overall reductions in pollution. Watershed restoration activities that compensate for pollutant production during management activities in watersheds of 303(d) listed streams should be included in such projects, and restoration activities should be implemented within a reasonable period of time in relation to pollutant producing activities (e.g., within 5 years).

The DEIS states that use of BMPs would reduce potential sedimentation in Bobtail and Quartz Creeks preventing further degradation of these water quality limited streams (page 3-7). Mitigation activities for impacts to soil and water resources are identified on pages 3-14 and 3-15. These mitigation activities should reduce or minimize erosion and sediment production and transport during construction, however, even with use of such BMPs it is likely that some additional pollutant (sediment) delivery to 303(d) listed streams may still occur. The DEIS states that short-term increases of small amounts of sediment are expected from construction activities (page 3-138), and that the tensioning site at structure 18/11 has the greatest potential for generating sediment that could adversely affect Bobtail Creek.

We believe the FEIS should identify and discuss watershed restoration activities to control other existing sediment sources in order to provide compensation for the sediment production and transport associated with transmission line and road construction activities for 303(d) listed streams (e.g., stabilize existing eroding banks; improve/install BMPs on additional existing roads perhaps in cooperation with the Forest Service to reduce existing road sediment sources). Activities to control and reduce existing sediment sources are needed to provide full assurance that no further degradation occurs to 303(d) listed streams during transmission line and road construction, since a small amount of sediment transport is still likely to occur even with use of BMPs during transmission line and road construction. Unless existing sediment sources are reduced, 303(d) listed streams will be further degraded by transmission line and road construction.

6. EPA considers the protection, improvement, and restoration of riparian areas and wetlands to be a high priority. Wetlands and riparian areas increase landscape and species diversity, support many species of western wildlife, and are critical to the protection of water quality and designated beneficial water uses. Potential impacts on riparian areas and wetlands include: water quality, habitat for aquatic and terrestrial life, flood storage, ground water recharge and discharge, sources of primary production, and recreation and aesthetics.

Executive Order 11990 requires that Federal Agencies "take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities..." and agencies

are further directed to "avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds (1) that there is no practicable alternative to such construction, and (2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use...". In addition national wetlands policy has established an interim goal of **No Overall Net Loss of the Nation's remaining wetlands**, and a long-term goal of increasing quantity and quality of the Nation's wetlands resource base.

We are pleased that impacts to wetlands and floodplains have been evaluated (Section 3.4), and that none of the new structures would be constructed in wetland areas (pages 3-51, 3-54), and that BMPs would be used to minimize impacts to wetlands (pages 3-56, 3-57). We are also pleased that the DEIS indicates that all applicable Clean Water Act permits for work in wetlands and streams will be obtained (page 3-56).

As you know discharges of fill material into wetlands and other waters of the United States are regulated by Section 404 of the Clean Water Act, 33 U.S.C. 1344, which is administered jointly by the U.S. Army Corps of Engineers and EPA. It is important that the BPA consult with the Corps of Engineers in regard to 404 permit requirements for construction activities in or near streams or wetlands, (e.g., contact Mr. Allan Steinle of Corps of Engineers Montana Office in Helena at 406-441-1375). The 404(b)(1) Guidelines (found at 40 CFR Part 230) provide the environmental criteria by which 404 permits are evaluated. See Corps of Engineers Montana Regulatory Office website for further information, https://www.nwo.usace.army.mil/html/od-rmt/mthome.htm .

The DEIS states that there would be wetland disturbance from removal of structures 22/4, 23/8 and 26/2 (page 3-51), and that construction of new structures would result in "low to moderate" wetland impacts (page 3-52). The DEIS also states that new access roads would not be constructed in wetlands where possible, although this does not preclude wetland impacts as a result of road work. The extent of wetland impacts from the proposed project, therefore, has not been quantified and is not entirely clear. We recommend that FEIS include a clearer identification and disclosure of impacts to wetlands, and suggest that a table be provided in the FEIS showing the acreage of wetlands to be impacted by the proposed project, along with a discussion of the associated wetland functions and values that may be impacted.

If there are significant wetland and/or river and stream dredge and fill impacts, we generally recommend that a 404(b)(1) analysis be included as an Appendix to the FEIS, since inclusion of a draft 404(b)(1) analysis helps assure that 404 permit requirements are properly integrated into the NEPA process in accordance with 40 CFR 1500.2(c).

Section 404 Dredge and Fill Permit rules/policies require that adverse impacts to aquatic resources be avoided and minimized as much as possible, and that unavoidable impacts to wetlands be compensated for. Wetlands restoration, creation or enhancement measures should be proposed to compensate for unavoidable impacts to wetlands to attain no net

loss of wetlands. The goal of wetland mitigation should be to replace the functions and values of impacted wetlands in areas adjacent to or as close as possible to the area of wetlands loss. Wetland restoration is preferred to wetland creation or enhancement because restoration has a higher rate of success.

We did not see a clear identification of when and where mitigation wetlands would be restored or created to compensate for wetlands impacted by transmission line and road construction to assure that there will be no net loss of wetlands as a result of the proposed project. We believe the final EIS should more clearly identify and disclose proposed wetland mitigation activities that would compensate for unavoidable impacts to wetlands. This information could be provided in the narrative of the EIS or in the 404(b)(1) analysis appended to the EIS.

EPA/Corps policy has also accepted acre-for-acre replacement of wetlands as a surrogate for replacement of functions and values when there is a lack of definitive information on functions and values, although adjustments may be necessary to reflect the expected degree of success of mitigation, and provide an adequate margin of safety to reflect anticipated success (i.e., greater than acre-for-acre replacement is suggested when impacted wetlands have high function & value and likelihood of replacement of functions is low). Traditional mitigation is often not successful in fully restoring wetland function, and 2:1 or higher mitigation ratios are sometimes required to mitigate wetlands impacts. Construction/enhancement of wetlands to compensate for impacted wetlands should occur in advance or concurrent with activities causing wetlands impacts to reduce temporal losses of wetland functions.

We recommend that a Wetland Mitigation Plan be prepared to assure that adequate replacement of lost wetland functions and values occurs. This mitigation plan should include consideration of direct, indirect, and cumulative effects. It should contain a statement of goals, a monitoring plan, long-term management/protection objectives and a contingency plan (a commitment to conduct additional work if required to meet the goals of the plan). The mitigation plan should also include best management practices and mitigation measures that will manage stormwater runoff from roadways before it reaches wetlands, streams and other aquatic habitats. In general, wetlands, including mitigation wetlands, should not be used for treatment of stormwater. This Plan should be approved by the appropriate agencies before implementation of the proposed project.

7. The DEIS states that the proposed action and Alternative 1 would disturb 20 additional acres and 58 additional acres, respectively, along the transmission line corridor and approximately 4.5 additional acres due to access road construction (Tables 3-16 and 3-17), and that the realignment options would add additional right-of-way (ROW) clearing and road construction impacts (Table 3-18). The amount of soil disturbance identified in Tables 3-16 and 3-17 in the vegetation section of the DEIS appears to differ somewhat with soil disturbance acreage identified in Tables 3-2 and 3-4 in the section addressing impacts to soil and water resources. These inconsistencies should be corrected in the

FEIS.

8. As noted in the DEIS (page 3-38) soil disturbance creates conditions favoring the spread of noxious weeds. The DEIS states that transmission line and road construction activities would have a "moderate to high" impact on noxious weed spread in the project area (page 3-41). We are pleased that the DEIS also identifies proposed activities that would mitigate the spread of weeds (pages 3-45, 3-46). We support use of noxious weed mitigation and control methods, since many noxious weeds can out-compete native plants and produce a monoculture that has little or no plant species diversity or benefit to wildlife.

Weed prevention is the most cost-effective way to manage and control weeds by avoiding new infestations and spread of weeds, and thus, avoiding the need for subsequent weed treatments (e.g., weed prevention practices such as minimizing ground disturbance, revegetating disturbed areas, use of weed free seed, cleaning vehicles and equipment, and other practices that prevent infestation and spread of weeds). Early recognition and control of new infestations avoids wider future use of herbicides and other control methods.

EPA encourages prioritization of weed control methods that focus on non-chemical treatments first, with reliance on chemicals being the last resort, since weed control chemicals can be toxic and have the potential to be transported to surface or ground water following application. Herbicide drift into streams and wetlands could adversely affect aquatic life and wetland functions such as food chain support and habitat for wetland species.

The DEIS indicates that overspray of herbicides could potentially affect water quality (page 3-7). We recommend use of 50 feet no spray buffer zones adjacent to streams and wetlands, and mechanical weed removal or hand-pulling of weeds adjacent to aquatic areas. Hand-pulling can be effective for weeds that do not contain extensive root systems near surface waters. It may be helpful to add a list of those weed species which can be effectively hand-pulled (i.e. those without large tap roots and spreading rhizomatous root systems). The herbicide application technique of hand or manual wipe-on (especially applicable for contact systemic herbicides such as glyphosate) is an option to control individual weed plants up to the existing water level adjacent to streams or sensitive aquatic sites.

Herbicides should be applied at the lowest rate effective in meeting project objectives and according to guidelines for protecting public health and the environment. All efforts should be made to avoid movement or transport of herbicides into surface waters that could adversely affect public health, fisheries or other water uses. The Montana Water Quality Standards include a general narrative standard requiring surface waters to *be free from substances that create concentrations which are toxic or harmful to aquatic life*.

It is important that the water contamination concerns of herbicide usage be fully evaluated and mitigated. All efforts should be made to avoid movement or transport of herbicides into surface waters that could adversely affect fisheries or other water uses. Herbicides, pesticides, and other toxicants and chemicals must be used in a safe manner in accordance with Federal label instructions and restrictions that allow protection and maintenance of water quality standards and ecological integrity, and avoid public health and safety problems.

Herbicide applicators should be advised of the potential for runoff of herbicides at toxic concentrations into the streams. The applicators should take precautions during spraying (e.g., applying herbicide only after careful review of weather reports to ensure minimal likelihood of rainfall within 24 hours of spraying; special precautions adjacent to the stream to reduce runoff potential; etc.). It should be unequivocally stated that no herbicide spraying will occur in streams and wetlands or other aquatic areas (seeps, springs, etc.,). Herbicide drift into streams and wetlands could adversely affect aquatic life and wetland functions such as food chain support and habitat for wetland species. Streams and wetlands in any area to be sprayed be identified and flagged on the ground to assure that herbicide applicators are aware of the location of wetlands, and thus, can avoid spraying in or near wetlands.

We are particularly concerned about potential use of more toxic and persistent herbicides such as picloram (Tordon), since they have higher potential for more serious stream and/or groundwater contamination. We recommend that roadside drainage areas leading to intermittent and perennial streams be flagged as no-spray zones and not sprayed with picloram based herbicides. We also recommend that picloram not be used at rates greater than 0.25 lbs/acre, and suggest that the Forest Service consider applications of persistent herbicides such as picloram only once per year.to reduce potential for accumulation in soil. Potential for persistant herbicides to accumulate in soil in harmful amounts are reduced if sites are treated only once per year (twice being the limit). Trade-offs between effective weed control and effects on soil productivity and leaching concerns may need to be considered. A second treatment application if needed should only occur after 30 days (or according to label directions).

For your information, Dow AgroSciences, the manufacturer of Tordon 22K, has recently developed supplemental labeling for Tordon 22K for areas west of the Mississippi River. They have directions for wick or carpet roller applications. Tordon 22K herbicide can be applied using wick or carpet roller equipment where drift presents a hazard to susceptible crops, surface waters, and other sensitive areas. One part Tordon 22K is mixed with 2 parts water to prepare a 33% solution. The wick method of application is more labor intensive but very effective at targeting particular noxious weeds adjacent to surface waters, wetlands, or protected plants.

Most picloram products, including Tordon 22K, are Restricted Use Pesticides (RUPs) requiring pesticide applicator certification to purchase and apply. It is important that U.S.

Forest Service employees be certified throughout the duration of the project. If commercial applicators will be contracted for RUP applications, we recommend checking to make sure their MT commercial RUP license is current. Please contact Montana Dept. of Agriculture at (406) 444-5400 for more information. Also, please note that registration for Access (which has picloram as an active ingredient) is cancelled.

Some suggestions we have to reduce potential water quality and fisheries effects from herbicide spraying are to assure that applicators: 1) are certified and fully trained and equipped with the and appropriate personal protective equipment; 2) apply herbicides according to the label; and 3) use treatment methods that target individual noxious weed plants in riparian and wetland areas (depending on the targeted weed species, manual control or hand pulling may be one of the best options for weed control within riparian/wetland areas or close to water). The herbicide application technique of hand or manual wipe-on (especially applicable for contact systemic herbicides such as glyphosate) may be an option to control individual plants up to the existing water level adjacent to streams or sensitive aquatic sites.

We also recommend that weed treatments be coordinated with the Forest botanist to assure protection to sensitive plants, and coordinated with fisheries biologists and wildlife biologists to assure that sensitive fisheries and wildlife habitat areas are protected. You may also want to consider use of a more selective herbicide (clopyralid) for use in conifer associated communities to reduce impacts on non-target vegetation. We also note that spotted knapweed, which is a prevalent noxious weed species in western Montana, is non-rhizomatous and should be relatively easy to control with lower rates of the most selective low toxicity herbicides.

For your information, the website for EPA information regarding pesticides and herbicides is http://www.epa.gov/pesticides/ . The National Pesticide Telecommunication Network (NPTN) website at http://nptn.orst.edu/tech.htm which operates under a cooperative agreement with EPA and Oregon State University and has a wealth of information on toxicity, mobility, and environmental fate on pesticides which may be helpful (phone number 800-858-7378).

9. While we are pleased that a post-construction survey will be conducted to confirm whether weeds have been controlled (page 3-47, we also recommend that BPA commit to annual field reviews, perhaps in coordination with local weed control Districts, to determine appropriate treatment or control measures for noxious weeds which may be needed on an on-going basis.

10. We very much support proposed use of gates on access roads to discourage recreational vehicle travel on access roads (page 3-47), since motorized vehicles disturb soil, create weed seedbeds, and disperse weed seeds.

11. We understand that shield wires are often struck by birds in flight (Avian Power Line

Interaction Committee, APLIC). Accordingly, we encourage BPA to use transmission line structural designs recommended by APLIC to minimize adverse impacts to the avian community. This is especially important since the Libby to Troy transmission line will be constructed in a river corridor with significant avian use.

We also recommend development of a monitoring program to determine if bird strikes or electrocutions occur as a result of this project. Field surveys conducted during the spring and fall migratory periods and the spring nesting period to locate birds which have been electrocuted or have struck transmission lines will aid in the process of identifying and modifying problem structures.

12. Thank you for providing analysis and discussion regarding potential health and environmental effects associated with electromagnetic fields induced by the transmission line (Section 3.10 and Appendices H and J). We are pleased that the DEIS analysis predicts that the level of such impacts would be "low" (page 3-180).

13. The DEIS indicates that the proposed action would affect air quality by construction and vegetation removal activities which create dust, use of heavy equipment which emits pollutants (carbon monoxide, carbon dioxide, sulfuroxides, PM-2.5, nitrogen oxides, volatile organic hydrocarbons, aldehydes, and polycyclic aromatic hydrocarbons), and electric field corona which causes minor releases of ozone and nitrogen oxides (page 3-217). The City of Libby is a PM-2.5 and PM -10 non-attainment area. The DEIS states that the proposed action would conform with state and federal Clean Air Act regulations because the estimated annual PM-10 emissions are lower than 70 tons per year for conformity in a non-attainment area, and proportionally, PM-2.5 emissions are below 7 tons per year (page 3-218). The DEIS also states that all construction and maintenance activities associated with the proposed action would be "low" due to dust control activities and new vehicle emission standards and changes in fuel characteristics (pages 3-218, 3-219).

We recommend that the sources and associated growth trends, including mobile, stationary (woodburning or industry) and area (construction, forestry, agriculture) of PM-2.5 be analyzed further to provide information about the expected PM-2.5 levels associated with transmission line and road construction in comparison with current or historical levels. We also recommend showing the Libby area PM-2.5 and PM-10 ambient values and standards in micrograms/cubic meter in a table for comparison purposes to promote improved public understanding of the air quality issue.

In addition, we recommend that more detail be provided in the FEIS in regard to minimizing the dust and other emissions during construction including the indirect impacts (rock crushing and other material production and processing) as well as dust and mud tracking. In addition we recommend mention of limiting diesel emissions by reduced idling and modern diesel engines and/or use of Ultra Low Sulfur Diesel in the construction equipment.